MEMORANDUM. UTAH DEPARTMENT OF TRANSPORTATION

DATE: September 8, 2003

TO: Those on the attached list

FROM: Howard J. Anderson, P.E.

Engineer For Pavements

SUBJECT: Utah Pavement Council

Date: September 17, 2003

Location: UDOT Complex, Large Conference Room, First Floor

Address: 4501 South 2700 West

Salt Lake City, UT 84119

Time: 1:00 PM to 4:00 PM

The next Utah Pavement Council meeting is scheduled as shown above.

Attendance August 20:

Mohammad Rahman, Cameron Petersen, Murari Pradhan, Tim Biel, Rodney Terry, Troy Peterson, Joe Johnson, Larry Gay, James Hulse, Todd Laker, Scott Andrus, Bill Lawrence, Todd Emery, Steve Niederhauser, Pete Negus, Doug Watson, David Bursell, Dave Valley, Bruce Vandre, Spencer Guthrie, Marshall Schakelford, Reid Brown, John Butterfield, Richard Sharp, and Howard Anderson.

The following ground rules are recommended for our group: 1. Participate by providing your agenda items and reviewing the specifications or procedures and making comments. 2. Bring your reviewed copy of the draft. 3. Come on time and stay and participate as best you can. 4. Stay on task during discussions. 5. Keep personal gripes to a minimum. 6. Keep side conversations during breaks only.

Notes from August 20th, 2003 Meeting:

- 1. **Welcome** Howard Anderson, the notes were approved from last time with no changes.
- 2. **Presentation on the Infrared Camera and its uses** Dave Valley and David Bursell of Flir Systems traveled from Colorado at Howard's request to give us this presentation. Howard mentioned how the Washington State study had shown that a 25 degree F difference in the HMA mat temperature results in a 2 percent drop in pavement density at those locations. We all are aware of the affect pavement density has on the pavement life at those locations. Washington State uses the infrared camera to locate those areas of

poor compaction and they take their acceptance cores in those locations. The camera or temperature segregation has thus been shown to relate to pavement performance. Dave went over the Washington State research as well and covered topics like night or late season paving when temperatures are more difficult to maintain. He also talked about how the loading and unloading of the trucks into the paving machine can introduce temperature segregation. The use of the material transfer devise of the shuttle buggie has been shown to greatly reduce temperature segregation and produce a much more homogeneous mat. The infrared Camera is also a tool that the contractor could use as part of their quality control. Applications with PCC and steel are also possible.

- 3. **PG Binder Map Proposed Changes and Binder Suppler Meeting Announcement** Cameron. Cameron handed out a document on PG 70-28 and PG 64-34 binders and the new binder selection map for review. He also passed out a document on Acid and Alkaline Modification of Binders, Summary of Concerns and UDOT plans. Basically, the Superpave Expert Task Group (ETG) is looking close at this issue. It looks like they were not conservative enough on the high end and too conservative on the low end. The proposed changes involve using a PG 70-28 where a PG 64-34 and PG 64-28 used to be specified. PG 64-34 would still be used in two general parts of the state, in the Logan Cache Valley area and along U.S. 40 from Midway to Vernal.
- 4. **Gyratory Recommendations** Howard passed out his document for the use of the gyratory compactors. This includes recommendations for using the various compactor types and getting data to correlate from one machine to the other. In summary the Brovold Type compactors will be used as the standard and correction factors can be used for other compactor types. If a testing dispute between the Region lab and the contractor lab comes up the UDOT Central lab will act as the standard. Calibration procedures, now required monthly, and maintenance procedures are covered in the new Section 961 of the Materials Part 8 Manual.
- 5. **Field Trip (Salt Lake area, to be arranged) for those who want to see the Infrared Camera used with an HMA project.** The field trip was cancelled because the contractor on the State Street project had finished paving for the day before we were ready to go out. Dave Valley mentioned that he would be in town in about a month again and would let us know so we could schedule another field trip to use the camera on again.
- 6. **Sample Procedures on Cores for Density** Joe Johnson. Joe had a question on the location for cores taken for acceptance, based on the random time and random mat coordinate. How close to the exact point must they be taken. He will e mail his question for Howard to take to the next RME meeting for discussion.
- 7. **Superpave Mix Design Verification** Doug Watson. Doug asked if anyone was having problems verifying mix designs. The discussion centered around the idea of letting experienced contractors field verify their mixtures. The pro and cons of this were briefly discussed. It was mentioned that Scott, Larry and Murari were already working on this

and had made recent changes to the Materials Manual of Instruction Section 960 to do some of the things Doug was talking about.

8. Next meeting date. Wednesday, September 17, 2003.

TO :

Dario Alvarez Pioneer Oil Co. Scott Andrus Region 3 Materials

Wade Betenson Atser Materials Division Tim Biel Tim Bochnowski Holcim Cement Co. Reid Brown **BMW** Group Consultants Lawrence Buss Construction Division John Butterfield Region 2 Materials Tom Case Granite Construction Co. Stephane Charmot Koch Asphalt Co. Bob Crunk Holcim Cement Co.

Rob Duncan Ash Grove Cement Company

Troy Dunsmore QC Testing Todd Emery FHWA

Mike Forrest Staker/Parson Paving Co.
Ave Forseth Pioneer Oil Co.
Larry Gay Region 4 Materials

Darrell Giannonatti Construction and Materials Divisions

Jim Golding Geneva Rock Co.

Spencer Guthrie BYE Civil Engineering

Jerry Hall Geneve Rock Co.

Craig Haskell Region 3
James Hulse Koch
Bruce Hutchinson ICS

Joe Johnson Geneva Rock Co.
Karen Kiggins Heckett MultiServ
Hugh Kirkham Construction Division
Todd Laker Holcim Cement Co.
Bill Lawrence Materials Division
Frank Mayfield Staker/Parson Paving Co.
Fred McGregor Granite Construction Co.

Mitzi McIntyre ACPA

Steven Park Region 2 Materials Cameron Petersen Materials Division Troy Peterson Materials Division Murari Pradhan Materials Division Mohammad Rahman **GARCO** Testing Tim Rose Region 2 Construction Region 1 Materials Rodney Terry Rich Thorn Utah AGC

Karl Verhaeren Region 4 Construction Glenn Waite Western Rock Products

Douglas Watson CMT

Chris Winkler Trinadad Lake Asphalt
Grant Wiley Region 3 Materials
Brooke Williams Holcim Cement Co.
Mont Wilson Granite Construction Co.

Mike Worischeck Consultant
Scott Yates Pioneer Oil Co.

AGENDA

Utah Pavement Council Wednesday, September 17, 2003

1:00 PM UDOT Complex Large Conference Room, First Floor 4501 South 2700 West Salt Lake City, UT 84101

1:00 - 1:10	1.	Welcome - Howard Anderson Summary:
1:10 - 2:00	2.	Follow up on Revision of an Updated Bonded Wearing Course Specification - Stephane Charmot. Summary:
2:00 - 2:30	3.	OGSC Pool Fund Study - Murari Pradhan Summary:
2:30 - 2:45		Break
2:45 - 3:15	4.	Manual 8 Section 960 Guidelines for Superpave Volumetric Mix Design, (review of recent changes) - Murari Summary:
3:15 - 3:45	5.	Four Corners Meeting, Topics of Interest - Howard Anderson Summary:
3:45 - 4:25	6.	Other Items: Summary:
4:25 - 4:30	7.	Next meeting date? Wednesday, October 15, 2003? Note: This meeting date conflicts with the annual RMAUPG meeting in Denver Colorado.